Strategic Alliances between Businesses & Universities

Southern Growth Policies Board

Recent Work

- The Mercedes & the Magnolia: Preparing the Southern Workforce for the Next Economy
- Invented Here: The Southern Innovation Index
- Innovation U.

Southern Innovation Index

- 56 Indicators
- Current Data
- 10-Year Targets
- U.S. Average

R&D Trends

- National Science Foundation database, DOC data
- R&D: Federally-performed, universityperformed, industry-performed
- 28-37 year window

Federal R&D

- 1970-1999
- 8 States increased share
- Biggest share increases: Arkansas, West Virginia, North Carolina, South Carolina
- Biggest share decreases: Kentucky, Missouri, Louisiana
- SGA Region: 44.84% in 1970, 56.60% in 1999
- Virginia 5.85% in 1970, 10.28% in 1999

University-performed R&D

- **1972-2000**
- 11 states increased share
- Biggest share increases: South Carolina, Virginia, Kentucky, Georgia
- Decreases in share: Puerto Rico, Missouri, West Virginia
- SGA Region: 24.51% in 1972, 33.65% in 2000
- Virginia: 1.16 in 1972, 1.96% in 2000

Industry-performed R&D

- **1**963-2000
- 7 states increased share
- Biggest share increases: Arkansas, North Carolina, Mississippi
- Decreases in share: Louisiana, West Virginia,
 Alabama, Missouri, Tennessee, Oklahoma
- SGA Region: 13.67% in 1963, 14.19% in 2000
- Virginia: 0.74% in 1963, 1.36% in 2000

Industry-performed R&D

- SGA: 34.2% of nation's economy, 14.19% of industry-performed R&D
- SGA Gap (2000): \$39.9 billion
- Virginia Gap (2000) \$2.5 billion

Industry-performed R&D

- Closest to marketplace—intended for commercialization
- 75% of all R&D is industry-performed;67% of all R&D is industry-funded
- The branch plant economy & the failure to recruit or build private R&D capacity

Innovation U.

- No knowledge, no knowledge economy
- Universities as primary source
- 12 Case studies of universities doing a particularly good job of building alliances with industry and playing active roles in economic development of region
- Behavior that pays economic dividends

The Essence of Partnering

- Trust
- Reciprocity
- Results



Research Focus

- Industry Research Partnerships
- Technology Transfer
- Industrial Extension & Technical Assistance
- Entrepreneurial Development
- Industry education/training partnerships

Research Focus

- Culture and Rewards
- Formal Partnerships with Economic Development Organizations
- Industry/University Advisory Boards and Councils

The Universities

- Carnegie-Mellon
- Georgia Tech
- Ohio State
- Penn State
- North Carolina State
- Purdue

- Stanford
- Texas A&M
- UC-San Diego
- Utah
- UW-Madison
- Virginia Tech

Industry Research Partnerships

- Single points of contact & coordinating structures
- Simplified research contracts—master agreements
- Databases of faculty expertise
- Hiring scientists with industry or entrepreneurial experience

Industry Research Partnerships

- Research parks contiguous to campus
- Linking graduate education and industry research partnerships



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